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(54) CASE FOR PORTABLE DISPLAY DEVICES

(75) Inventors: **Si Han Kim**, 338-1, Daessangyong-Ri Choweol-Myun, Kwangju-Kun,

Kyunggi-Do (KR) 464-862; **Jang Ho Kim**, Kyunggi-Do (KR); **Hyung Nyun**

Kim, Seoul (KR)

(73) Assignee: Si Han Kim, Kyunggi-Do (KR)

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(56) References Cited

U.S. PATENT DOCUMENTS

1,263,895	Α	*	4/1918	Hubbard	16/251
1,444,398	Α	*	2/1923	Sheperd	296/63
2,481,877	Α	*	9/1949	Rhodes	16/221
3,399,782	Α	*	9/1968	Bascom	211/43

(Continued)

FOREIGN PATENT DOCUMENTS

JP 5-30918 4/1993

(Continued)

Primary Examiner—Lanna Mai (74) Attorney, Agent, or Firm—Norris McLaughlin & Marcus PA

(57) ABSTRACT

A case for a portable display device is provided which can realize a large-sized screen by interconnecting a plurality of display elements. When the display elements are unfolded, the adjacent sides of the display elements closely contact each other, thereby minimizing the non-display area. When the display elements are folded, the outer surface of the display elements can be protected. The case includes a foldable panel housing receiving at least two flat display panel elements. The panel housing is provided with an opening such that when the panel housing is unfolded, the adjacent sides of the fiat display elements closes contact each other. The case further includes a hinge supporting member for providing the folding/unfolding operation of the panel housing and a cover for covering a side of the flat display elements, which is exposed through the opening, to protect the display elements.

15 Claims, 27 Drawing Sheets

